## MISCELLANEOUS NOTES

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## REFERENCE

Tate, G. H. H. (1942): Review of the vespertilionine bats, with special attention to genera and *nat. Hist.*, 80: 221-297.

## 3. FURTHER NOTES ON THE BIRTH AND GROWTH OF THE LEOPARD-CAT (FELIS BENGALENSIS) IN CAPTIVITY

Acharjyo and Mishra (1980) reported the birth of four litters to the female of a pair of Leopard-Cats (*Felis bengalensis*) at the Nandankanan Biological Park, Orissa upto December, 1978. The present note is intended to place on record the details of three more litters born to the female of the same pair of Leopard-Cats in the same Park.

The pair of Leopard-Cats were housed in an enclosure having the floor space of approximately 7 square metres, height 2.80 metres. There were two cave like retiring dens one above the other at a height of half a metre from the ground. Each of them was fed with 300 gms of goat meat and 50 gms of beef daily. One live chicken to each was given once a month in place of goat meat and beef.

Out of three litters born during the period from January, 1979 to August, 1980, two were recorded in March and one in June. The size of each of the three litters was always two and interestingly all the six kittens were females. The eyes of all these kittens were closed at birth and the eyes of four kittens under observation opened on 14th day (two kittens), 15th day (one kitten) and 16th day (one kitten). The canines of two kittens under observation erupted on 29th and 30th day respectively. The inter-parturition intervals recorded thrice (Dates of birth: 4.7.1978, 30.3.1979, 9.3.1980 and 30.6.1980) were 267 days, 344 days and 112 days respectively generally depending upon the period of survival of the kittens after birth. Unfortunately the female died in August, 1980. During the period from April, 1976 to August, 1980, she had given birth to seven litters.

The four kittens born on 30-3-1979 and 9-3-1980 weighed 113 to 120 g with a mean of 115.75 g and measured 24 to 26 cm from tip of nose to tip of the tail with a mean of 24.88 cm including tail lengths of 7 cm each at birth.

Growth: Weekly growth records of two (one female and one male) mother-reared kittens born in the Park on 4-7-1978 was maintained upto 37 weeks (about  $8\frac{1}{2}$  months) and the details are given in the Table.

Date	Age in weeks	Weight in Female	Kg. Male
4-7-1978	Birth weight	0.118	0.120
18-7-1978	2	0.232	0.243
8-8-1978	5	0,460	0.480
5-9-1878	9	0.845	0.910
3-10-1978	13	1.190	1.280
7-11-1978	18	1.760	1.780
19-12-1978	24	2.200	2.410
30-1-1979	30	2.880	2.900
20-3-1979	37	2.990	3.230

A study of this table reveals that the weight of the kittens were almost doubled at the age of two weeks and quadrupled at the age of five weeks. There is a little over ten fold increase of birth weight at the age of 13 weeks and appeared almost as large as the parents at the age of 37 weeks ( $8\frac{1}{2}$  months). The table also reveals that the growth rate of the male kitten was comparatively faster than the female kitten.

Both kittens were able to come down from the upper cave like den on 4-8-1978 (32nd day) and started licking minced goat meat along with their mother.

The litter size of three births of this species at West Berlin Zoo was 1, 3 and 2 respectively, there were two females and four males and the births were recorded in April, July and October (Frese 1980). He has further given the estimated birth weight of four kittens as between 100 to 130 g.

The four births of this species were recorded as follows: February, 1; March, 1; May, 1; and July, 1 and the litter size was one to two with a mean of 1.75 kittens per litter (Acharjyo and Mishra 1980). They have fur-

VETERINARY ASSISTANT SURGEON, NANDANKANAN BIOLOGICAL PARK, P. O. BARANG, DIST. CUTTACK. WILDLIFE CONSERVATION OFFICER, 145-SAHEED NAGAR, BHUBANESWAR 751 007, October 4, 1982. ther stated that there were four females and three males; at birth seven kittens weighed 93 to 120 g. (mean 113.14 g.) and measured 22 to 25 cm. (mean 24.14 cm.) tip to tip including tail lengths of 6.5 to 7 cm. and the inter-parturition intervals recorded thrice were 81,305 and 104 days respectively mostly depending on the period of survival of the young.

Prater (1971) states that the young of this species have been obtained in March and May and 3 to 4 kittens may be born in a litter. In India, this species mates in May and has 3 to 4 young per litter after a gestation period of 56 days (Asdell 1964).

Weekly growth record of a female kitten of this species maintained upto the age of 11 weeks and reported by Acharjyo and Mishra (1980) reveals the weight of 1.156 kg. at the age of 11 weeks. A single male kitten born in a litter doubled its birth weight in 11 days, quadrupled in 26 days and by 50th day there was an eight-fold increase in weight whereas the three male kittens born in another litter have doubled their birth weight in 25 days, quadrupled in about 44 days and increased eight fold in 60 days (Frese 1980).

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